DOCUMENT RESUME

ED 165 789 IR 006 859

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TITLE Alvin Community College Law Enforcement Students' Perceptions of Learning Through the Use of Audiovisual Media in a Criminal Investigation Course.
INSTITUTION Alvin Community Coll., Tex.
PUB DATE Oct 78
NOTE 41p.; Bibliography and appendices are minimally legible

EDRS PRICE MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS *Audiovisual Aids; *Audiovisual Instruction; Community Colleges; Educational Research; Films; *Instructional Media; *Law Enforcement; Media Selection; *Student Attitudes; *Student Opinion; Videotape Recordings

ABSTRACT

The practicum described examined student attitudes toward the use of audiovisual materials and the perceived effectiveness of the various modes presented in a Criminal Investigations class. The 25 subjects, who had been exposed to slide presentations, filmstrips, films, and videotaped programs, completed an opinionnaire at the completion of the course. This report includes a statement of the problem, the background and significance of the study, procedures employed, analysis of the data collected, findings, and recommendations for the selection and use of audiovisual materials in such classes. A bibliography is included, as well as a listing of the program titles and producers and a sample student opinion survey form. (RAO)

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ALVIN COMMUNITY COLLEGE LAW ENFORCEMENT STUDENTS' PERCEPTIONS OF LEARNING THROUGH THE USE OF AUDIOVISUAL MEDIA IN A CRIMINAL INVESTIGATION COURSE

by

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IR006857

October, 1978

ABSTRACT

Bethscheider, John., Alvin Community College Law Enforcement Students' Perceptions of Learning Through the Use of Audiovisual Media in a Criminal Investigation Course.

Purpose

An examination of student attitudes toward the use of media presentations in a Criminal Investigation class was the topic for this practicum.

The purpose of this study was:

1. To determine students' attitudes on the use of audiovisual media in a Criminal Investigation course.

2. To determine which major modes of audiovisual media students think are most effective.

3. To determine which audiovisual presentations students think are not effective.

Methods

In the fall session of 1977, a class on Criminal Investigation was held using audiovisual media or one of the primary teaching strategies. Students were exposed to slide presentations, film strips, movies and television programs. Each student who participated in the course was given an opinionnaire regarding their attitude toward the use of the audiovisual material as an instructional technique.

Findings

The findings indicated that there are several problem areas.

1. More than half the students indicated that the instructor did not summarize or emphasize major points of the audiovisual material.

2. Students were not allowed to raise questions before and after the presentations.

3. Students stated that they were not allowed to review or replay media presentations.

4. Students' perception of the most effective media indicated that slides were most effective, followed by movies, television, and film strips.

Recommendations

The following recommendations were made to the instructor of Law Enforcement, the Director of Law Enforcement and Director of the Media Center.

1. Additional studies should be extended to other programs on campus. Studies could be conducted on: types of media and their effectiveness, students' preference for certain audiovisual media and the evaluation of teaching.

2. Changes should be made in the instructor delivery system to allow for more class discussion and to allow students to replay and review media programs.

3. Students who have previously viewed media presentations should not be required to view it a second time. The student should be informed that he will be held accountable for the material.

4. The following presentations should be reviewed for their value to the course: "Arrest Problems," "Securing Suspects" and "On the Stand."

TABLE OF CONTENTS

		Page
I.	INTRODUCTION	1
II.	STATEMENT OF PROBLEM	2
III.	BACKGROUND AND SIGNIFICANCE OF THE STUDY	3
IV.	PROCEDURES	11
V.	ANALYSIS OF DATA	12
VI.	FINDINGS	19
VII.	RECOMMENDATIONS	21
	BIBLIOGRAPHY	24
	APPENDICES	27

LIST OF TABLES

Table		Page
1.	STUDENT EVALUATION OF INSTRUCTIONAL MEDIA	13
2.	STUDENT PERCEPTION OF MOST EFFECTIVE MEDIA	17

I. INTRODUCTION

Motion pictures, slides, filmstrips and other audiovisual materials have been produced in great quantities for Law Enforcement programs in the last few years. Many of these audiovisual programs are excellent for teaching skills or shaping a proper attitude. Other materials are of poor quality and may be viewed by the student as a waste of time. Very few of the media productions used in the classroom today are ever scrutinized or evaluated by the instructor.

Marshall McLuhan has stated the importance of evaluating media and its use in the classroom. He states that, "teachers should carry out constant audience research, analyzing available materials to determine their appropriateness for definite purposes and for individual students."[1] Classroom media should be evaluated in terms of student attitudes and perceptions and its effect on learning.

Alvin Community College is a small public college with an enrollment of about 2,700 students. This institution was very much involved in the quest for better methods of instruction. One method of instruction that was popular at Alvin Community College was the use of media presentations as learning activities. The Law Enforcement Department purchased over thirty-five media presentations within the last three years with institutional funds and Title VI-A grants. Most of these presentations were used in the Criminal Investigation course.

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[1]Brown, James W., Lewis, Richard B., Harclerod, Fred F. AV Instruction Media and Methods. New York, McGraw-Hill Book Company, 1969.

An examination of student attitudes toward the use of media presentations in a Criminal Investigation class was the topic for this practicum. The first step in any evaluation of learning should be to determine what perceptions students have about the techniques used by the instructor.

II. STATEMENT OF PROBLEM

Media presentations were being used in the Law Enforcement class on Criminal Investigation without feedback as to students attitudes towards the effectiveness of the presentations. The problem for this study was to determine the attitudes of Law Enforcement students toward the use of audiovisual media in a Criminal Investigation course.

This study was significant to the development of Alvin Community College's Law Enforcement program. Additionally, the Dean of Institutional Research and Development had suggested that such a study be undertaken. (See Appendix A.)

This study was related to the core module on learning theory and applications because it was concerned with attitudes on learning through perception. A section of this paper will deal with the theory of learning through perception and the use of audiovisual material.

The purpose of this study was:

1. To determine students attitudes on the use of audiovisual media in a Criminal Investigation course.
2. To determine which major modes of audiovisual media students think are most effective.
3. To determine which audiovisual presentations students think are not effective.

III. BACKGROUND AND SIGNIFICANCE OF THE STUDY

The background and foundation for this paper will cover three areas. First, learning theory as applied to the use of audiovisual materials; second, to the types of audiovisual instruction; and third, to specific research on students evaluation of the use of audiovisual materials in instruction.

Learning is an individual experience, and most learning theorists agree that real learning takes place when there is a change in behavior. The change in behavior may vary from acting differently, thinking a new way or acquiring a new skill or new knowledge.[2] Since this paper is concerned with primarily the use of audiovisual materials this section on learning theory will deal with audiovisual materials as they apply to general principles of the psychology of learning. The reason for this Kemp notes is that, "Unfortunately, learning theory, as a body of knowledge, as yet has contributed little directly to the design of such materials."[3]

There are two major classes of learning theories, the behaviorists or connectionists and the field theorists or cognitive theorists. It should be noted that most psychologists point out that there are areas of emphasis and agreement among all learning theorists.[4]

The behaviorists are concerned with interpreting man's behavior in terms of stimulus and response, this is sometimes referred to as S-R learning. For every specific reaction there is an exact response to a sensation or stimulus.

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[2]Kemp, Jerrold E. Planning and Producing Audiovisual Materials. Scranton, Pennsylvania, Chandler Publishing Company, 1968, p. 12.

[3]Ibid., p. 12.

[4]Ibid., p. 12.

The use of the audiovisual aid of a television is an example of a stimulus. Some stimuli are more effective for instruction than others. The key to good instruction is to determine which method is most effective at the right time.[5]

The second theory is that of cognitive theory. It is concerned with the processes of intelligence, insight and abilities. Cognitive theory is concerned with the following:

> Human action is seen as marked by a quality of intelligence and the ability to create relationships. The psychologists supporting these theories believe that in each new perception the object or event is seen differently because the cognitive structure within an individual has been reorganized by each of his prior perceptions.[6]

A practical approach to learning theory and its application to media has been offered by C. R. Carpenter, in an article in winter 1957 addition of AV Communication Review entitled "Psychological Concepts and Audio-Visual Instruction." Carpenter list principles to follow when focus is on audiovisual material in terms of learning.

1. Importance or motivation to the learner. The most important and persistently basic task of teaching is to release, instigate and increase such motivational processes and forces an interest, need, desire and wish to learn.
2. The personal relevance concept. Teaching materials are effective in an ordered manner depending on the degree of their personal relevance to individual students.
3. Selected processes and audiovisual instruction. What is presented to students and what is accepted and learned by them are very different.

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[5]Kemp, Jerrold E. Planning and Producing Audiovisual Materials. Scranton, Pennsylvania, Chandler Publishing Company, 1968, p. 12.

[6]Ibid., p. 13-14.

4. The need for organization. More information can be learned more enduringly when materials are meaningfully and systematically organized than when they are unorganized or poorly organized.
5. The rate of presentation of material to be learned. The rate of presentation of information in relation to the comprehension rates of students is a fundamental consideration of learning.
6. Reporting results promptly. Learning is increased by knowledge or results. Information about the nature of a good performance, knowledge of mistakes, and knowledge of successful results aid learning.[7]

Kemp notes that there are no concise principles of learning that can be directly applied to the design of classroom audiovisual materials. However, the work of Carpenter and Dale do describe conditions of learning which have definite bearing on the selection of media and on the planning of instruction. The learning theory generalizations are helpful when attempts to understand the purpose of the use of audiovisual materials.[8]

Another important generalization that should be considered when applying audiovisual media to a learning situation is that messages must not be only perceived and comprehended, they must also be used to change an attitude, skill or knowledge. If some kind of change does not take place then theoretically learning has not occurred. The key to this problem is that the audiovisual material must be pertinent and relevant to the students' needs. Thus, the concept of motivation is most important to the success of learning by use of media.

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[7]Carpenter, C. R. "Psychological Concepts and Audio-Visual Instruction," AV Communication Review, Vol. 5, No. 1, Winter 1957, p. 361-369.

[8]Hitchens, Howard, Editor. Selecting Media for Learning, Readings from Audiovisual Instruction, Washington, D.C., Association for Education Communications and Technology, 1974, p. 54.

A persuasive message should precede the presentation and follow up information should be given at the conclusion of the presentation. Bretz notes, "It has long been recognized that a learner does not learn from lectures or television presentations alone, but as a combined result of such factors as; prior motivation and preparation, plus later thought and discussion; review and response practice; reinforcement for correct responses; and frequent opportunities to apply his knowledge in situations of actual use.[9]

As stated in the procedures section of this paper, audiovisual material means the use of slide-sets, film strips, movies and video taped presentations or television programs in instruction. It is interesting to note that the American Institute for Research found that there is no real understood rationale why some information is presented by audiovisual means rather than programmed instructions or by textbooks or slide presentations. The problem is further complicated by the tendency to select media only after the instructional development process.[10]

When selecting audiovisual media consideration should be given to the most efficient and effective instructional vehicle available. Law Enforcement courses are technical/vocational in nature. Examination of media selection models for vocational technical programs indicates that there are five main points to consider when selecting media. First, learning should relate to the job task in question; second, the degree of proficiency desired; third, the media that is available for instruction; fourth, the degrees of proficiency realized as a function of various learning type-media matches; and last the

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[9]Bretz, Rudy. A Taxonomy of Communication Media. New Jersey, Englewood Cliffs, 1971, p. 60.

[10]Anderson, Ronald H. Selecting and Developing Media for Instruction, 1976, p. 3.

production cost of media.[11]

Research in the area of media selection for vocational technical programs indicates that there are five general classes of behavior or types of learning: (1) learning factual information, (2) learning multiple discriminations, (3) learning principles, concepts, and rules, (4) learning procedures, (5) learning to perform skilled perceptual motor acts. The key to proper instruction by use of audiovisual materials is to identify the types of learning that one wishes the student to accomplish. This is most often accomplished before a course begins by constructing learning objectives for the student to follow.[12]

William H. Allen is a respected member of the research community in the field of audiovisual media and has compiled a list of instructional media relating to specific objectives. He has categorized media relating to learner objectives: factual information, visual identification, principles, performing skills, and attitudes. Criticism of this system is that it is difficult to translate the generalizations into practical grades for selecting media.[13]

A medium potential rating scale that identifies media characteristics and learner characteristics was developed by Marvin Lavin. "This rating leads to a numerical value and selection of a medium or combination of media to serve the instructional task being considered."[14]

A list of thirteen media was devised by Wilshusen and Stowe that relates the factors of learner characteristics such as size of group, task requirements,

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[11]Hitchens, Howard, Editor. Selecting Media for Learning, Readings from Audiovisual Instruction, Washington, D.C., Association for Educational Communications and Technology, 1974, p. 16.

[12]Ibid., p. 16.

[13]Kemp, Jerrold E. "Which Medium," Audiovisual Instruction, December, 1971, p. 13.

[14]Ibid., p. 13.

equipment availability and instructor control. This was another attempt to formulate some type of organized system for selecting media.[15] In summary of this section of selecting media it should be noted that there is no real agreement by media experts as to the best technique for selecting classroom audiovisual media.

The last section of background material deals with the main concern of this paper, student evaluation of instructional media. Although there is very little empirical data on student evaluation of audiovisual media there are numerous studies on this evaluation of media itself.

Rochester Institute of Technology has devised a student evaluation instument to improve student attitudes toward and acceptance of televised instructional components as part of a course structure. A thirty item student opinionnaire was designed by the faculty and members of the television staff. The purpose of the opinionnaire is to gain feedback from students regarding the use of television in instruction.[16]

The opinionnaire included six areas of interest to media producers and instructors:

1. The classroom instructors' ability to intergrate the televised component of instruction into the total course structure.
2. The organizational and technical qualities of television as a mode of presentation.
3. Opportunities to ask questions concerning the televised instructional component...

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[15]Kemp, Jerrold E. "Which Medium," Audiovisual Instruction, December, 1971, p. 13.

[16]Forrester, Thomas C., Zakia, Richard D. "Evaluation of Televised Instruction." Audiovisual Instruction, December, 1972, p. 52.

4. Pacing the televised instructional component, as well as the level of difficulty...
5. Whether course objectives were met, to what extent the course contributed to their education, and their overall evaluation of the course.
6. Specific methods which students found to be effective in presenting the course. Also, specific methods which might be used to improve the presentation of the course.[17]

The results of this study indicated that graduate students have a more positive opinion of television instruction than do undergraduate students. Areas for improvement were noted as printed materials and student/instructor dialogue.[18]

The University of Wisconsin at Milwaukee is involved in the process of media evaluation through student feedback. Researchers at Milwaukee feel that media evaluation should be on a going process throughout the course. "Throughout the class meetings careful observations are made by the instructor, who notes any elements that seem to be working unsatisfactorily." Students are assured that the purpose of the feedback is to gather data useful in improving instruction. In summary, the three basic elements of the evaluations system are: the instructors' observations, student feedback, and changes in the field.[19]

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[17]Forrester, Thomas C., Zakia, Richard D. "Evaluation of Televised Instruction." Audiovisual Instruction, December, 1972, p. 52.

[18]Ibid., p. 53.

[19]Koskey, Eugene B. "It's About Time We Practice What We Teach," Audiovisual Instruction, April, 1971, p. 68.

The Educational Product Information Exchange Institute has estimated that 99 percent of the learning materials now on the market have never been systematically and effectively shaped and reshaped by feedback from learners. This is the condlusion EPIE made after four years of research on evaluation on media.[20]

Kenneth Komoski who testified before Congress on media products states that there are two problems:

> When product evaluation with learners does not happen, most often it is not carried out in order in gather feedback, from learners with which to shape and further improve the performance of the product. Secondly, neither producers nor purchasers pay much attention to the evaluation that are carried out. They appear to be simply a quasi-scientific ritual having no practical effect on anybody's behavior.[21]

In summary it should be noted that there is very little research on student feedback on audiovisual materials. There is a great deal of concern among educators about proper evaluation of media and its use in instruction, but very little is being done. As noted in this paper, perhaps the real problem may not be evaluation in the classroom because some instructors may see its too late to evaluate after institutional dollars have been spent on a product. The real problem is product evaluation before the product is on the market. Nevertheless, it is the classroom instructors' duty to find some way of weeding out the poor audiovisual productions from the good ones. One method of evaluation that can be useful on the institutional level is that of the student evaluation.

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[20]Komoski, Kenneth. "50,000,000 Educational Consumers Can't Be Wrong-But Who's Listening," Audiovisual Instruction, September, 1971, p. 82.

[21]Ibid., p. 82.

IV. PROCEDURES

In the fall session of 1977, a class on Criminal Investigation was held using audiovisual media as one of the primary teaching strategies. Students were exposed to slide presentations, film strips, movies and television programs. (For a list of presentations see Appendix B.) The Criminal Investigation course had twenty-six students who are all majors in the Law Enforcement program. Each student who participated in the course was given an opinionnaire regarding their attitude toward the use of the audiovisual material as an instructional technique. (See Appendix C for opinionnaire.)

The opinionnaire that was used is a modification of one used by the Rochester Institute of Technology faculty of televised instruction. To investigate the validity of the opinionnaire it was submited to a sample of ten faculty members and three members of the media staff. These two groups were asked to make comments regarding the opinionnaire and to note items that might need clarification or changing.

Data that was collected was tabulated and placed in tables. Analysis of data and its relationship to the purpose of this paper is made in the section on findings. Recommendations regarding selection and uses of audiovisual material in Criminal Investigation classes are made in the last section of this paper. Information from this study was made available to the Dean of Institutional Research, the media staff and members of the Law Enforcement Department.

Definition of Terms

The definition of terms that were used in this paper are taken from Rudy Bretz text, A Taxonomy of Communication Media.

1. Filmstrip: A communication medium involving static graphic materials which are recorded on a role, usually of standard sprocheted motion-picture film, and projected frame-by-frame for groups viewing.

2. Hardware: Equipment as distinquished from materials, machinery, tools, and similar devices.

3. Instruction: Teaching and learning; the systematic attempt to impact knowledge and skills, and to instigate learning.

4. Instructional Medium: Any component of the learning enviroment which provides or helps to provide stimuli to learning.

5. Instructional Television (IVT): Any audio-motion-visual system using tele-transmission, that is used primarily for formal instruction.

6. Multimedia: More than one medium in a single communication, either sequentially or simultaneously.

7. Slide-set: A set of slides, usually contained in a magazine, for projection in an automatic projector.

8. Video Tape: Thin acetate or mylar tape of various widths, coated with magnetic material, used to record and store video and audio information.

V. ANALYSIS OF DATA

The data in Table I describes the sample of students who completed the opinionnaire. The original sample contained twenty-six students. One student was unable to complete the course, leaving a final sample of twenty-five students.

The first item in Table I, "Were the classroom instructor's objectives for the course made clear?" indicated that seventy-six percent of the students thought the objectives were clear while twenty-four percent did not think they were made clear.

TABLE I

STUDENT EVALUATION OF INSTRUCTIONAL MEDIA

Schedule Item	Freshman N=10	Sophomores N=15	Total N=25	Total Percent 100
Were the classroom instructor's objectives for the course made clear?				
Yes	8	11	19	76
No	2	4	6	24
No Comment	0	0	0	0
Did the classroom instructor summarize or emphasize major points of the audio-visual materials?				
Yes	3	5	8	32
No	6	8	14	56
No Comment	1	2	3	12
Was the classroom instructor well prepared for each class?				
Yes	9	12	21	84
No	0	2	2	8
No Comment	1	1	2	8
Were there any sound or picture difficulties during the media presentations that interferred with your learning?				
Yes	0	1	1	4
No	10	14	24	96
No Comment	0	0	0	0

TABLE I (continued)

Schedule Item	Freshman N=10	Sophomores N=15	Total N=25	Total Percent 100
Were you ever frustrated during the audio-visual presentations because you could not raise questions?				
Yes	6	4	10	40
No	4	11	15	60
No Comment	0	0	0	0
If you had any questions during the audio-visual presentation, did you note them so as to have them answered later?				
Yes	1	3	4	16
No	9	12	21	84
No Comment	0	0	0	0
Did the instructor use examples or illustrations to help clarify the media material?				
Yes	2	5	7	28
No	8	9	17	68
No Comment	0	1	1	4
Was the presentation of televised material organized?				
Yes	8	13	21	84
No	2	2	4	16
No Comment	0	0	0	0
Were the audio-visuals effective in presenting subject matter?				
Yes	8	12	20	80
No	2	3	5	20
No Comment	0	0	0	0
When audio-visual material was used as part of instruction, did you have an opportunity to review or replay this material?				
Yes	0	0	0	0
No	10	15	25	100
No Comment	0	0	0	0

The next item was of significance, "Did the classroom instructor summarize or emphasize major points of the audiovisual materials?". More than half, fifty-six percent, said no the instructor did not summarize or discuss major points. While only thirty-two percent said "yes."

The statement, "Was the classroom instructor well prepared for each class?", was significant in that eighty-four percent felt he was while only eight percent thought he was not prepared, and eight percent had no comment.

Ninety-six percent of the students felt there were no problems with the sound or picture portions of the media presentations.

Responses to, "Were you ever frustrated during the audiovisual presentations because you could not raise questions?" was significant in that forty percent said "yes" they were frustrated, while sixty percent said "no."

"If you had any questions during the audiovisual presentations did you note them so as to have them answered later?" was of interest because eighty-four percent of the students did not make notes while only sixteen percent did.

The next item was important in that sixty-eight percent of the students stated that the instructor did not use examples of illustrations to help clarify the media material. On the other hand, twenty-eight percent thought the instructor did use examples. Four percent of the students had no comment.

The majority of students thought the televised material was organized, eighty-four percent said "yes," while only sixteen percent responded "no."

Eighty percent of the students felt the audiovisuals were effective in presenting the subject matter, twenty percent felt they were not effective.

The last question on the opinionnaire, "When audiovisual material was used as part of instruction, did you have an opportunity to review or replay this material?" was most significant because one hundred percent of the students

indicated that they did not have the opportunity to review or replay the material.

The second half of the opinionnaire was concerned with students' written comments on the audiovisual presentations. The majority of students answered the questions with a simple "yes" or "no." In this section each question will be presented followed by selected comments made by the students.

"Was the material presented in the audiovisual instruction component well paced?" Five full written responses were received on this quesion. 1) "I enjoyed the slide presentations most and the pace was slow enough to allow one to take notes." 2) "Pace of the television program was fine, but I did not think the slide show was fast enough." 3) "I think the slides were an excellent idea--pace was just fine." 4) "If by pace you mean speed, I guess they were ok." 5) "Audiovisual instruction pace was good, but I did not like class comments after film."

"Was the level of difficulty of the audiovisual material appropriate for your preparation and ability." Nine written responses were received on this question. Comments: 1) "As a certified officer, I thought I had been exposed to most of the material in the past." 2) "Some of the material was very basic but I guess some people need to start someplace." 3) "The material was appropriate for my ability but did not take much preparation." 4) "Material was very simple, easy to understand." 5) "I would have enjoyed the material better if there had been more action." 6) "Some of the presentations were very basic, I have seen most of this material before in training school." 7) "The material was appropriate to my level and ability." 8) "I have seen several of the police training films before." 9) "I think the films on chemical analysis are too complicated for us."

"How much of the information presented in the audiovisual presentations could be directly applied to your occupational interest?" Six written responses were given for this item. Comments: 1) "Very little of the material presented could apply to my interest because I am interested in traffic enforcement, not investigation." 2) "Because I am very interested in becoming a criminal investigator, I thought the material was very helpful." 3) "I work as a detective for the Houston Police Department and I learned many new things that will be helpful to me on my job." "I also think that our department would benefit from the use of some of this material." 4) "All of the program is related to my occupational interest because I like police work." 5) "I am now studying for the rank of detective with the Pearland Police Department and have found the material to be in line with my occupational goals. 6) "The audiovisual materials could be applied to my occupational interest."

Table II indicated which form of media students found to be most effective in presenting material.

TABLE II

STUDENT PERCEPTION OF MOST EFFECTIVE MEDIA

Schedule Item	Freshman N=10	Sophomores N=15	Total N=25	Total Percent
A. Slides	4	8	12	48
B. Movies	5	4	9	36
C. Film Strips	0	1	1	4
D. Television	1	2	3	12

The data in Table II indicates that forty-eight percent preferred the slides, thirty-six percent preferred the movies. Only four percent of the students preferred the film strips and twelve percent the television presentations. A detail list of media presentations is provided for in Appendix B.

The next item, "Was there any slide presentation, movie, film strip or television presentation which did not help you learn the unit material." The following media presentations were listed as not helpful: 1) Slide presentations: "Arrest Problems", sixty percent thought it was not helpful, and ninety percent of the students thought that "Securing Suspects" was not helpful. Thirty-five percent thought that the presentation "On the Stand" was not helpful. 2) The film strips were the most unpopular, with eighty percent thinking that "Laboratory Instrumentation" was not useful and ninety percent felt that "Macroscope Examination" was not useful, while sixty-five percent thought the presentation "Laboratory Chemistry" was not useful. 3) Movies; twenty percent of the students thought that the movie "Homicide Investigation" was not helpful in learning the unit material. 4) Television; seventy-five percent of the students thought that only one television program was not helpful, the program "Interrogation of Suspects."

All students were in agreement with the item that stated, "Was there considerable agreement between the announced objective of the course and the audiovisual material used." One hundred percent of the students responded with a response of "yes."

The item, "Were there any audiovisual presentations used that you did not think should be used in a Criminal Investigation course?" "Which Ones?" Students listed the following presentations; "Arrest Problems," "Securing Suspects," "On the Stand."

The following comments were received regarding the item, "The Law Enforcement Department would like to know what was done especially well in presenting this course." Comments: "I like the way the material is presented with the use of sight and sound." "The instructor was most helpful." "I think the use of slide shows and other things like television gives the student a good break in the class." "There were too many movies and television." "The guide the instructor gave us at the first of the year was most helpful." "The best thing about this course was the practical method of working up a crime scene report." "The use of visual aids was very helpful." "I think the best part of the course was the actual doing of a crime scene." "The best part of the course was the use of visual media that made the course interesting."

The last item on the survey stated, "The Law Enforcement Department would also like to know what specific things that might be done to improve the presentation of this course." Comments: "Have more guest speakers." "You might have a little less use of slides and more lecture." "Give the student more exercises like the crime scene." "If we are going to have tests over the films, let us have access to them. We need to review them before the test." "You might call in investigators from the local area to speak to the class." "Give us more time to look at the slides, not enough information was given to help us study for the test." "Do not test over television or movies, I can't remember enough material for the test." "This course could be improved by using another textbook with less discussion of theory and more on how to do an actual investigation."

IV. FINDINGS

As stated in section two of this paper, the primary purpose of this study was to determine students' attitudes on the use of audiovisual media in a Criminal Investigation course, to determine major modes of audiovisual media

students think are most effective and what modes are not effective. With consideration being given to the small class size of twenty-five students, the following results can be concluded from this study. Only items that are of significance will be discussed in this section.

The majority of students, seventy-six percent, thought the objectives for the course were made clear. Each student was provided an outline for the course, learning objectives, a time table and learning activities. This seems to be a positive indication that students like the idea of having the course outline. The majority of students, eighty-four percent, also thought the instructor was well prepared for the class. Based on this information, students do have a favorable attitude toward the use of media in the Criminal Investigation course.

The findings also indicate that there are several problem areas; 1) More than half the students indicate that the instructor did not summarize or emphasize major points of the audiovisual material. Perhaps the instructor should have an introduction to each presentation along with a short summary of the main points of the presentation. 2) Students should be allowed to raise questions before and after the presentation, the instructor should request that each student note his question and give ample time for questions. 3) The next problem was that sixty-eight percent of the students stated the instructor failed to use examples of illustrations. The instructor might cite examples or make an attempt to relate the media material to meaningful learning experiences for the student. 4) One of the most important problem areas noted in this section was that of not allowing the student to review or replay the media. Students should be allowed access to media material if they are going to be tested over the material.

The second section was devoted to written responses. The level of difficulty for the material might have been more difficult for pre-service

than in-service students. Perhaps the problem is that most of the media presentations made for law enforcement are very basic and are directed toward the pre-service student. Most of the presentations are used in basic police certification courses and if this is the case, all certificated in-service students have viewed some of this media.

Students' perception of the most effective media indicated that slides were most effective, followed by movies, television, and film strips. It should be noted that students were exposed to twenty-two slide presentations prepared by Police Science Services are directed toward classroom objectives and course goals. The movies and television productions seem to be more entertaining with less emphasis on learning.

V. RECOMMENDATIONS

An attempt has been made in study to evaluate the use of instructional audiovisual media through the use of a student survey. The intent of this paper was not to determine if students actually learned by audiovisual media but assess their attitude toward the use of audiovisual media in the classroom. Only through the use of a valid test and proper experimental procedure could it be determined if actual learning has taken place.

The following recommendations are being made to the instructor of law enforcement, the Director of Law Enforcement and Director of the Media Center. The first recommendation is that this study be followed by additional studies. Additional studies should be extended to other programs on campus. Studies could be conducted on; types of media and their effectiveness, students' preference for certain audiovisual media and the evaluation of teaching strategies. A survey is needed to determine the extent and use of audiovisual media by faculty. Departmental studies could be conducted to determine if students do learn more from audiovisual media or how does the use of media

aid the learning process.

The findings indicated several particular problem areas in the delivery system of the instructor. Instructors should summarize major points of the presentation and allow for class discussion. Students should be given ample time to ask questions. When the instructor is giving his summary he should cite examples and relate the material to the learning objectives.

A major problem was the inability of students to replay or review the audiovisual media. One solution to this problem is to place the slides, film strips and television productions on reserve in the learning resources center. The learning resources center can provide a service of checking out audiovisual materials for instruction. Students could check out the materials and review them on their own time. If necessary, the learning resources center could provide a pre-test or practice test to assist the students. The movies will be the most difficult to replay or review, because if they are on loan or rental they will have to be returned. Perhaps the instructor could schedule more than one viewing of the movie. If students are going to be held accountable for audiovisual media content, they should be allowed to review or replay the material.

The next recommendation is in reference to the level of difficulty of the material. Some law enforcement students have stated that they have viewed the material in other courses or training programs. If a student has seen the presentation before and is willing to be held accountable for the material, he should not be required to view it a second time. The student should be told before hand that he will be held accountable for the material.

The last recommendation is that the instructor should review the following media presentations to determine that value to the course; "Arrest Problems," "Securing Suspects," and "On the Stand." A majority of students felt that

these presentations had no value to the course. If after reviewing the productions the instructor feels they are of value to the course, he should write a rationale for the students to explain the importance of these media.

In summary, giving students the choice of using media allows more flexibility in a program. A student should feel free to discuss problem areas in the classroom. The student should be allowed to give an honest evaluation without being threatened as he views the instructor as a facilitator of the learning process rather than the sole source of information and implementation. In addition, if he knows my comment cannot affect his grade and he knows exactly the performance necessary for a satisfactory grade in the course he is more likely to give an honest evaluation of the instructor.

BIBLIOGRAPHY

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Allen, William H. "What Do 50 Years of Media Research Tell Us," Audiovisual Instruction, March, 1973.

Anderson, Ronald H. Selecting and Developing Media For Instruction, 1976.

Best, John W. Research in Education, Englewood Cliffs, New Jersey, Prentice-Hall, 1970.

Bretz, Rudy. A Taxonomy of Communication Media. New Jersey, Englewood Cliffs, 1971.

Brown, James W., Lewis, Richard B., Harclerod, Fred F. AV Instruction Media and Methods, New York, McGraw-Hill Book Company, 1969.

Dale, Edgar. "A Basic Reference Shelf on Audiovisual Instruction," U.S. Department of Health, Education, and Welfare, August, 1968.

Dale, Edgar. Audiovisual Methods in Teaching, New York, The Dryden Press, 1969.

Forrester, Thomas C., Zakia, Richard D., "Evaluation of Televised Instruction." Audiovisual Instruction, December, 1972.

Hitchens, Howard, Editor. Selecting Media For Learning, Readings from Audiovisual Instruction, Washington, D.C., Association for Educational Communications and Technology, 1974.

Kemp, Jerrold E. Planning and Producing Audiovisual Materials. Scranton, Penn., Chandler Publishing Company, 1968.

Kemp, Jerrold E. "Which Medium," Audiovisual Instruction, December, 1971.

Koenig, Allen E., Hill, Ruane B. The Farther Vision, Educational Television Today, Madison, Wisconsin, The University of Wisconsin Press, 1969.

Komoski, Kenneth. "50,000,000 Educational Consumers Can't Be Wrong - But Who's Listening," Audiovisual Instruction, September, 1971.

Koskey, Eugene B. "It's About Time We Practice What We Teach," Audiovisual Instruction, April, 1971.

Moor, William J. "A Program for Systematic Instructional Improvement," Audiovisual Instruction, February, 1970.

Moore, G.A.B. :The Evaluation of a Media Resource - Based Learning Project and Its Modification of Traditional Classroom Procedures," Audiovisual Instruction, February, 1976.

Patsloff, Patricia, Price, Martha, Vaughn, Mary. Flexible Learning Environment, Collinsville, Illinois, P.A.M.I. Learning Systems, Inc., 1974.

Whitehead, Jack L. "Providing Feedback Through Student Response Systems," Audiovisual Instruction, October, 1975.

Winn, William. "Videotaping Teaching Practice: Strengths and Weaknesses," Audiovisual Instruction, January, 1974.

APPENDICES

APPENDIX A

MEMORANDUM

ACC

ALVIN COMMUNITY COLLEGE

OFFICE OF RESEARCH, PLANNING & DEVELOPMENT

MEMO NO. 8-77

TO: John Bethscheider, Director of Business & Industrial Technology

FROM: Cameron Douthitt

DATE: September 12, 1977

SUBJECT: Research Study Concerning Students' Attitudes Toward Audio-Visual Instruction in Law Enforcement Classes

As you know, Alvin Community College is interested in acquiring research data concerning students' attitudes towards audio-visual instruction. Please meet with me at your earliest convenience to discuss the evaluation procedure for such methods of instruction.

I would like to suggest that prior to our meeting, you may wish to review some literature and materials which are currently in the library of the Director of the Media Center.

Thanks for your interest and your willingness to assist in this worthwhile project.

csb

APPENDIX B

AUDIOVISUAL PRESENTATIONS FOR CRIMINAL INVESTIGATION

SLIDE PRESENTATIONS

1. Physical Evidence - Police Science Services
2. Drugs - Police Science Services
3. Surveillance - Police Science Services
4. Robbery Investigation - Police Science Services
5. Crime Scene Photography - Police Science Services
6. Reports - Police Science Services
7. Response to Burglary Calls - Police Science Services
8. Burglary Crime Scene Procedures - Police Science Services
9. Arrest Problems - Police Science Services
10. Bad Check Investigation - Police Science Services
11. Spotting Stolen Cars - Police Science Services
12. Securing Suspects - Police Science Services
13. Marijuana - Police Science Services
14. Forgery - Police Science Services
15. On the Stand - Police Science Services
16. Fingerprints - Police Science Services
17. Cocaine - Police Science Services
18. Rape Investigation - Police Science Services
19. Burglary Scene - Police Science Services
20. Burglary - Police Science Services
21. Burglary Investigation - Police Science Services
22. Investigation Pathology - Police Science Services

FILM STRIPS

1. Evidence - Robert J. Brady Company
2. Crime Scene - Robert J. Brady Company
3. Care, Custody, and Control - Robert J. Brady Company
4. Laboratory Instrumentation - Robert J. Brady Company
5. Macroscope Examination - Robert J. Brady Company
6. Comparative Micrography - Robert J. Brady Company
7. Laboratory Chemistry - Robert J. Brady Company

MOVIES

1. Homicide Investigation - Texas Department of Public Safety
2. Crime Scene Investigation - Texas Department of Public Safety

TELEVISION

1. Interrogation of Suspects - Texas Department of Public Safety
2. Auto Theft - Motorola Teleprograms Ins.
3. Investigation of Rape - Motorola Teleprograms Ins.
4. Field Interviewing - Motorola Teleprograms Ins.

APPENDIX C

SURVEY OF STUDENT OPINION OF AUDIOVISUAL INSTRUCTION

The course of instruction you are now receiving was designed to include audio visual media as a major instructional component. Please help us to evaluate this means of instruction be answering the questions in this opinion survey. The results of this survey will be used as part of a continuing effort by the Law Enforcement Department to improve the instructional process through the use of appropriate instructional technology.

COURSE: _____

SECTION: _____

DATE: _____

WHAT IS YOUR CLASS LEVEL?
(Circle One)

Freshman Sophmore

Respond to each question by marking the answer that best indicates your response while considering your needs and the learning experiences you have had in this course.

1. Were the classroom instructors objective for the course made clear?	Yes	No	No Comment
2. Did the classroom instructor summarize or emphasize major points of the audiovisual materials?	Yes	No	No Comment
3. Was the classroom instructor well prepared for each class?	Yes	No	No Comment
4. Did the instructor use examples or illustrations to help clarify the media material?	Yes	No	No Comment
5. Was the presentation of televised material organized?	Yes	No	No Comment

6. Were the audiovisuals effective in presenting subject matter?	Yes	No	No Comment.
7. Were there any sound or picture difficulties during the media presentations that interferred with your learning?	Yes	No	No Comment
8. Were you ever frustrated during the audiovisual presentations because you could not raise questions?	Yes	No	No Comment
9. If you had any questions during the audiovisual presentations did you note them so as to have them answered later?	Yes	No	No Comment
10. When audiovisual material was used as part of instruction, did you have the opportunity to review or replay this material?	Yes	No	No Comment

Please write the answer to these questions on the lines provided. If you have additional comments feel free to write on the back of this paper.

11. Was the material presented in the audiovisual instruction component well paced?

_____

_____

12. Was the level of difficulty of the audiovisual material appropriate for your preparation and ability?

_____

_____

13. How much of the information presented in the audiovisual presentations could be directly applied to your occupational interest?

_____

_____

14. Which form of media did you find to be most effective in presenting material? Circle one.

A. Slides B. Movies C. Film Strips D. Television

15. Comment on the effect of audiovisual material on your learning the unit material.

_____

_____

16. Was there any slide presentation, movie, film strip or television presentation which did not help you learn the unit material?

_____

_____

17. Was there considerable agreement between the announced objectives of the course and the audiovisual material used?

_____

_____

18. Were there any audiovisual presentations used that you did not think should be used in a Criminal Investigation course? Which ones?

_____

_____

19. The Law Enforcement Department would like to know what was done especially well in presenting this course. Please list below.

_____

_____

20. The Law Enforcement Department would also like to know what specific things which might be done to improve the presentation of this course.

_____

_____